

1030 Rec'd/DCTP 19 JUL 2001

FORM PTO-1390 (Modified)  
(REV 11-2000)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

PL-9830

U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR  
09/787,228

|   |  |  |
|---|--|--|
| INTERNATIONAL APPLICATION NO.<br>PCT/GB99/03081 | INTERNATIONAL FILING DATE<br>14 September 1999 | PRIORITY DATE CLAIMED<br>14 September 1998 |
|---|--|--|

TITLE OF INVENTION  
**Gene and Protein Libraries and Methods Relating Thereto**

APPLICANT(S) FOR DO/EO/US  
**Anna Hine, Jane Leonie Morgan, Albert Santos, and David Palfrey**

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☐ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☒ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. ☐ The US has been elected by the expiration of 19 months from the priority date (Article 31).
5. ☐ A copy of the International Application as filed (35 U.S.C. 371 (c) (2))
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).
10. ☐ An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).
11. ☐ A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. ☐ A copy of the International Search Report (PCT/ISA/210).

Items 13 to 20 below concern document(s) or information included:

13. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. ☐ A **FIRST** preliminary amendment.
16. ☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. ☐ A substitute specification.
18. ☐ A change of power of attorney and/or address letter.
19. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.
20. ☐ A second copy of the published international application under 35 U.S.C. 154(d)(4).
21. ☐ A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).
22. ☐ Certificate of Mailing by Express Mail
23. ☒ Other items or information:

copy of this transmittal for charging purposes  
copy of the Notification of Missing Requirements as required  
certificate of mailing by First Class Mail  
return postcard

07/20/2001 SNAJARRD 00000061 500588 09787228  
01 FC:156 130.00 CH

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|---|--|--|
| U.S. APPLICATION NO. (IF KNOWN, SEE 37 CFR<br><b>09/787,228</b> | INTERNATIONAL APPLICATION NO.<br><b>PCT/GB99/03081</b> | ATTORNEY'S DOCKET NUMBER<br><b>PL-9830</b> |
|---|--|--|

|   |                     |                     |             |                                  |           |
|---|---------------------|---------------------|-------------|----------------------------------|-----------|
| 24. The following fees are submitted:.  |                     |                     |             | <b>CALCULATIONS PTO USE ONLY</b> |           |
| <b>BASIC NATIONAL FEE ( 37 CFR 1.492 (a) (1) - (5)) :</b>   |                     |                     |             |                                  |           |
| <input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO .....  |                     |                     |             | <b>\$1000.00</b>                 |           |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO .....  |                     |                     |             | <b>\$860.00</b>                  |           |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO .....   |                     |                     |             | <b>\$710.00</b>                  |           |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) .....  |                     |                     |             | <b>\$690.00</b>                  |           |
| <input type="checkbox"/> International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) .....  |                     |                     |             | <b>\$100.00</b>                  |           |
| <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>   |                     |                     |             | <b>\$0.00</b>                    |           |
| Surcharge of <b>\$130.00</b> for furnishing the oath or declaration later than _____ <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).                 |                     |                     |             | <b>\$0.00</b>                    |           |
| <b>CLAIMS</b>   | <b>NUMBER FILED</b> | <b>NUMBER EXTRA</b> | <b>RATE</b> |                                  |           |
| Total claims  | - 20 =              | 0                   | x \$18.00   | <b>\$0.00</b>                    |           |
| Independent claims  | - 3 =               | 0                   | x \$80.00   | <b>\$0.00</b>                    |           |
| Multiple Dependent Claims (check if applicable). <input type="checkbox"/>   |                     |                     |             | <b>\$0.00</b>                    |           |
| <b>TOTAL OF ABOVE CALCULATIONS =</b>  |                     |                     |             | <b>\$0.00</b>                    |           |
| <input type="checkbox"/> Applicant claims small entity status. (See 37 CFR 1.27). The fees indicated above are reduced by 1/2.  |                     |                     |             | <b>\$0.00</b>                    |           |
| <b>SUBTOTAL =</b>   |                     |                     |             | <b>\$0.00</b>                    |           |
| Processing fee of <b>\$130.00</b> for furnishing the English translation later than _____ <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492 (f)). |                     |                     |             | <b>\$130.00</b>                  |           |
| <b>TOTAL NATIONAL FEE =</b>   |                     |                     |             | <b>\$130.00</b>                  |           |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31) (check if applicable). <input type="checkbox"/>                                |                     |                     |             | <b>\$0.00</b>                    |           |
| <b>TOTAL FEES ENCLOSED =</b>  |                     |                     |             | <b>\$130.00</b>                  |           |
|   |                     |                     |             | <b>Amount to be: refunded</b>    | <b>\$</b> |
|   |                     |                     |             | <b>charged</b>                   | <b>\$</b> |

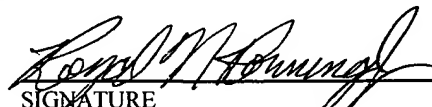
- a. ☐ A check in the amount of \_\_\_\_\_ to cover the above fees is enclosed.
- b. ☒ Please charge my Deposit Account No. 500-588 in the amount of \$130.00 to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 500-588 A duplicate copy of this sheet is enclosed.
- d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Royal N. Ronning, Jr.  
Amersham Pharmacia Biotech, Inc.  
800 Centennial Avenue  
Piscataway, New Jersey 08855

(732) 457-8423

  
SIGNATURE

Royal N. Ronning, Jr.  
NAME

32,529  
REGISTRATION NUMBER

July 13, 2001  
DATE

Applicant(s): **A. Hine, et al.**

PL9830

**09/787,228**

**March 14, 2001**

**To be assigned**

**To be assigned**

I hereby certify that this trans ltr + copy, notice(2), declaration, seq. listing (paper+disk), & postcard  
(Identify type of correspondence)

Assistant Commissioner for Patents, Washington, D.C. 20231 on July 16, 2001  
(Date)

(Typed or Printed Name of Person Mailing Correspondence)

(Signature of Person Mailing Correspondence)

# COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT  
United States Patent and Trademark Office  
Washington, D.C. 20231  
www.uspto.gov

|                               |                       |                  |
|-------------------------------|-----------------------|------------------|
| U.S. APPLICATION NO.          | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
| 09/787228                     | HINE                  | A PL-9830        |
| INTERNATIONAL APPLICATION NO. |                       |                  |
| PCT/GB99/03081                |                       |                  |
| I.A. FILING DATE              | PRIORITY DATE         |                  |
| 14 SEP 99                     | 14 SEP 98             |                  |

ROYAL N RONNING JR  
AMERSHAM PHARMACIA BIOTECH  
800 CENTENNIAL AVENUE  
PISCATAWAY, NJ 08855

DATE MAILED: 14 MAY 2001

## NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- ☒ The application fails to comply with the requirements of 37 CFR 1.821-1.825.
- ☐ This application does not contain, a "Sequence Listing" as a separate part of the disclosure on paper copy or compact disc, as required by 37 CFR 1.821(c).
- ☐ A copy of the "Sequence Listing" in computer readable format has not been submitted as required by 37 CFR 1.821(e).
- ☒ A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- ☐ The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- ☐ The paper copy or compact disc of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 CFR 1.821(e).
- ☐ Other: \_\_\_\_\_

### APPLICANT MUST PROVIDE:

- ☒ An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- ☐ An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- ☒ A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

FOR QUESTIONS REGARDING COMPLIANCE WITH THESE REQUIREMENTS, PLEASE  
CALL:

(703) 308-4216, for Rules interpretation,  
(703) 308-4212, for CRF submission help,  
(703) 287-0200, for PatentIn software help.

Deborah D. Williams

Telephone: 703-305-3744

**CERTIFICATE OF MAILING**

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Melissa Leck  
Type or print name

  
Signature

July 16, 2001  
Date

PL-9830

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application of: A. Hine, et al.                      Group Art Unit: To be assigned  
Serial Number: 09/787,228                      Examiner: To be assigned  
Filed: March 14, 2001  
For: Gene and Protein Libraries and Methods Relating Thereto

**Submission of Nucleotide and/or Amino Acid Sequence Listing**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

In response to the Notification to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures having a mailing date of May 14, 2001, in connection with the captioned application, Applicants submit the following items:

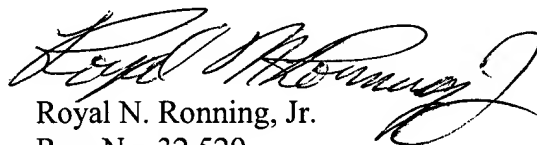
- 1) A revised computer readable form (CFR) copy of the sequence listing and a revised paper copy of the sequence listing, both generated on an IBM computer using PatentIn, Version 2.1 Software.
- 2) Required statements:
  - A. Applicants aver that the sequence listings do not include any new matter.

- B. Applicants aver that that sequence listings contained on the diskette are identical to those contained on the paper copy.

Applicants believe that they have fully complied with the Notification to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures, a copy of which is enclosed. Please direct any remaining issues to Applicant's counsel at the telephone number provided below.

Amersham Pharmacia Biotech, Inc.  
P.O. Box 1327  
800 Centennial Avenue  
Piscataway, New Jersey 08855-1327  
(732)457-8423 (voice)  
(732)457-8463 (facsimile)

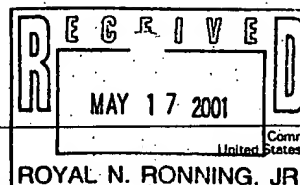
Respectfully submitted,

  
Royal N. Ronning, Jr.  
Reg. No. 32,529

**COPY**

DOCKETED FOR 14 July  
 BY 42  
 ON Sally & Desk

UNITED STATES PATENT AND TRADEMARK OFFICE



Commissioner for Patents, Box PCT  
 United States Patent and Trademark Office  
 Washington, D.C. 20231  
 www.uspto.gov

ROYAL N. RONNING, JR.

U.S. APPLICATION NO. 09/787228 FIRST NAMED APPLICANT HINE A PCT DOCKET NO. PL-9830

INTERNATIONAL APPLICATION NO.

PCT/GB99/03081

I.A. FILING DATE

PRIORITY DATE

14 SEP 99

14 SEP 98

DATE MAILED: **14 MAY 2001**

ROYAL N RONNING JR  
 AMERSHAM PHARMACIA BIOTECH  
 800 CENTENNIAL AVENUE  
 PISCATAWAY, NJ 08855

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

1. The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as ☐ a Designated Office (37 CFR 1.494) ☒ an Elected Office (37 CFR 1.495):

- ☒ U.S. Basic National Fee. ☐ Indication of Small Entity Status.  
☐ Copy of the international application. ☒ Translation of the international application into English.  
☐ Oath or Declaration of inventors(s). ☐ Translation of Article 19 amendments into English.  
☐ Copy of Article 19 amendments. ☐ Other:  
☒ Priority Document.  
☒ The International Preliminary Examination Report in English and its Annexes, if any.  
☐ Translation of Annexes to the International Preliminary Examination Report into English.

2. ☐ Applicant has requested early processing under 35 U.S.C. 371(f) but has not filed the following indicated items and/or the indicated items in paragraph 3 below. The Basic National Fee and the copy of the international application must be filed prior to 20 or 30 months from the priority date to avoid abandonment.

- ☐ U.S. Basic National Fee. ☐ Copy of the international application.

3. The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- ☐ a. Translation of the application into English. A processing fee will be required if submitted later than the appropriate 20 or 30 months from the priority date.  
☐ The current translation is defective for the reasons indicated on the attached Notice of Defective Translation.  
☐ b. Processing fee for providing the translation of the application and/or the Annexes later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(f)).  
☒ c. Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), properly identifying the application (preferably by the International application number and international filing date). A surcharge will be required if submitted later than the appropriate 20 or 30 months from the priority date.  
☐ The current oath or declaration does not comply with 37 CFR 1.497(a) and (b) for the reasons indicated on the attached PCT/DO/EO/917.  
☒ d. Surcharge for providing the oath or declaration later than the appropriate 20 or 30 months from the priority date (37 CFR 1.492(e)).

4. Additional claim fees of \$\_\_\_\_\_ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due (37 CFR 1.492(g)). See attached PTO-875.

5. ☒ Applicant has not submitted the required sequence listing pursuant to 37 CFR 1.821-1.825. See attached PCT/DO/EO/920.

**ALL OF THE ITEMS SET FORTH IN 3(a)-3(d), 4 AND 5 ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 22 OR 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

6. If box 3a or 3c is checked, a translation of the Annexes **MUST** be submitted no later than the time period set above or the Annexes will be cancelled. A processing fee will be required if submitted later than 20 or 30 months from the priority date.  
 7. ☐ The Article 19 amendments are cancelled since a translation was not provided by the appropriate 20 (37 CFR 1.494(d)) or 30 (37 CFR 1.495(d)) months from the priority date.

Applicant is reminded that any communication to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above. (37 CFR 1.5)

**A copy of this notice MUST be returned with this response.**

Enclosed: ☐ PCT/DO/EO/917  
☐ PTO-875

☐ Notice of Defective Translation  
☒ PCT/DO/EO/920

Deborah D. Williams

FORM PCT/DO/EO/905 (March 2001)

Telephone: 703-305-3744